AMENDMENTS TO THE CLAIMS

Claims 1, 2, 14, 15, 19, 20, and 26 have been amended. The following is a complete listing of the claims, which replaces all previous versions and listings of the claims.

1. (currently amended) A method for modeling a communication system, comprising the steps of:

assigning a plurality of simulated messages to one or more simulated external nodes based upon at least a simulated call model and a simulated network configuration;

distributing the plurality of simulated messages between a plurality of simulated active links connecting the one or more simulated external nodes to a plurality of simulated processors of a simulated telecommunication facility based on at least the simulated network configuration;

distributing the plurality of simulated messages between the plurality of simulated processors based on at least a simulated ~~network~~ mobile switching center architecture;

generating a plurality of simulated outgoing messages based upon at least the plurality of simulated messages and the simulated call model; and

distributing the plurality of simulated outgoing messages between the plurality of simulated active links based on at least the simulated network configuration and the simulated ~~network~~ mobile switching center architecture.

2. (currently amended) The method, as set forth in claim 1, comprising the step of:

estimating a contribution to processor occupancy for one or more processors of the plurality of simulated processors based on at least one of the plurality of simulated messages, the

plurality of simulated outgoing messages, a set of processor specific data, and the simulated ~~network~~ mobile switching center architecture.

3. (original) The method as set forth in claim 2, comprising the step of:

deriving a processor utilization for one or more processors of the plurality of simulated processors based on the respective contributions to processor occupancy.

4. (original) The method, as set forth in claim 1, comprising the step of:

deriving a bandwidth utilization for one or more links of the plurality of simulated active links based on at least one of the distribution of the plurality of simulated messages between the one or more simulated active links and the distribution of the plurality of simulated outgoing messages between the one or more simulated active links.

5. (original) The method, as set forth in claim 1, comprising the step of:

deriving a message load distribution based on at least the distribution of the plurality of simulated messages between the one or more respective simulated processors.

6. (original) The method, as set forth in claim 1, wherein the simulated telecommunication facility represents a mobile switching center.

7. (original) The method, as set forth in claim 1, wherein the one or more simulated external nodes represent at least one of a signal transfer point and an electronic switching system.

8. (original) The method, as set forth in claim 1, wherein one or more of the plurality of simulated processors represent at least a direct link node.

9. (original) The method as set forth in claim 1, wherein the one or more of the plurality of simulated processors represent components of a legacy network.

10. (original) The method, as set forth in claim 1, comprising the step of:

constructing a mobile switching center based on the simulated network configuration, wherein the simulated network configuration results in at least one of a desired distribution of the plurality of simulated messages between the plurality of simulated active links, a desired distribution of the plurality of simulated messages between the plurality of simulated processors, and a desired distribution of the plurality of simulated outgoing messages between the plurality of simulated active links.

11. (original) The method, as set forth in claim 1, comprising the step of:

upgrading a mobile switching center based on the simulated network configuration, wherein the simulated network configuration results in at least one of a desired distribution of the plurality of simulated messages between the plurality of simulated active links, a desired distribution of the plurality of simulated messages between the plurality of simulated processors, and a desired distribution of the plurality of simulated outgoing messages between the plurality of simulated active links.

12. (original) The method, as set forth in claim 1, comprising the step of:

procuring a processor-based component based on the simulated network configuration, wherein the simulated network configuration results in at least one of a desired distribution of the plurality of simulated messages between the plurality of simulated active links, a desired distribution of the plurality of simulated messages between the plurality of simulated processors, and a desired distribution of the plurality of simulated outgoing messages between the plurality of simulated active links.

13. (original) The method, as set forth in claim 1, comprising the step of:

constructing a link based on the simulated network configuration, wherein the simulated network configuration results in at least one of a desired distribution of the plurality of simulated messages between the plurality of simulated active links, a desired distribution of the plurality of simulated messages between the plurality of simulated processors, and a desired distribution of the plurality of simulated outgoing messages between the plurality of simulated active links.

14. (currently amended) A tangible, machine readable media, comprising:

code adapted to assign a plurality of simulated messages to one or more simulated external nodes based upon at least a simulated call model and a simulated network configuration;

code adapted to distribute the plurality of simulated messages between a plurality of simulated active links connecting the one or more simulated external nodes to a plurality of

simulated processors of a simulated telecommunication facility based on at least the simulated network configuration;

code adapted to distribute the plurality of simulated messages between the plurality of simulated processors based on at least a simulated ~~network~~ mobile switching center architecture;

code adapted to generate a plurality of simulated outgoing messages based upon at least the plurality of simulated messages and the simulated call model; and

code adapted to distribute the plurality of simulated outgoing messages between the plurality of simulated active links based on at least the simulated network configuration and the simulated ~~network~~ mobile switching center architecture.

15. (currently amended) The tangible, machine readable media, as set forth in claim 14, comprising:

code adapted to estimate a contribution to processor occupancy for one or more processors of the plurality of simulated processors based on at least one of the plurality of simulated messages, the plurality of simulated outgoing messages, a set of processor specific data, and the simulated ~~network~~ mobile switching center architecture.

16. (original) The tangible, machine readable media, as set forth in claim 15, comprising:

code adapted to derive a processor utilization for one or more processors of the plurality of simulated processors based on the respective contributions to processor occupancy.

17. (original) The tangible, machine readable media, as set forth in claim 14, comprising:

code adapted to derive a bandwidth utilization for one or more links of the plurality of simulated active links based on at least one of the distribution of the plurality of simulated messages between the one or more simulated active links and the distribution of the plurality of simulated outgoing messages between the one or more simulated active links.

18. (original) The tangible, machine readable media, as set forth in claim 14, comprising:

code adapted to derive a message load distribution based on at least the distribution of the plurality of simulated messages between the one or more respective simulated processors.

19. (currently amended) A device for modeling a communication system, comprising:

a processor configured to execute code adapted to:

assign a plurality of simulated messages to one or more simulated external nodes based upon at least a simulated call model and a simulated network configuration;

distribute the plurality of simulated messages between a plurality of simulated active links connecting the one or more simulated external nodes to a plurality of simulated processors of a simulated telecommunication facility based on at least the simulated network configuration;

distribute the plurality of simulated messages between the plurality of simulated processors based on at least a simulated ~~network~~ mobile switching center architecture;

generate a plurality of simulated outgoing messages based upon at least the plurality of simulated messages and the simulated call model; and

distribute the plurality of simulated outgoing messages between the plurality of simulated active links based on at least the simulated network configuration and the simulated ~~network~~ mobile switching center architecture.

20. (currently amended) The device, as set forth in claim 19, wherein the processor is configured to execute code adapted to:

estimate a contribution to processor occupancy for one or more processors of the plurality of simulated processors based on at least one of the plurality of simulated messages, the plurality of simulated outgoing messages, a set of processor specific data, and the simulated ~~network~~ mobile switching center architecture.

21. (original) The device, as set forth in claim 20, wherein the processor is configured to execute code adapted to:

derive a processor utilization for one or more processors of the plurality of simulated processors based on the respective contributions to processor occupancy.

22. (original) The device, as set forth in claim 19, wherein the processor is configured to execute code adapted to:

derive a bandwidth utilization for one or more links of the plurality of simulated active links based on at least one of the distribution of the plurality of simulated messages between the one or more simulated active links and the distribution of the plurality of simulated outgoing messages between the one or more simulated active links.

23. (original) The device, as set forth in claim 19, wherein the processor is configured to execute code adapted to:

derive a message load distribution based on at least the distribution of the plurality of simulated messages between the one or more respective simulated processors.

24. (original) The device, as set forth in claim 19, wherein the device comprises a general purpose computer.

25. (original) The device, as set forth in claim 19, wherein the device comprises a special purpose computer.

26. (currently amended) A method for manufacturing a device for modeling a communication system, comprising the step of:

loading a computer program onto a device, wherein the computer program comprises:

code adapted to assign a plurality of simulated messages to one or more simulated external nodes based upon at least a simulated call model and a simulated network configuration;

code adapted to distribute the plurality of simulated messages between a plurality of simulated active links connecting the one or more simulated external nodes to a plurality of simulated processors of a simulated telecommunication facility based on at least the simulated network configuration;

code adapted to distribute the plurality of simulated messages between the plurality of simulated processors based on at least a simulated ~~network~~ mobile switching center architecture;

code adapted to generate a plurality of simulated outgoing messages based upon at least the plurality of simulated messages and the simulated call model; and

code adapted to distribute the plurality of simulated outgoing messages between the plurality of simulated active links based on at least the simulated network configuration and the simulated ~~network~~ mobile switching center architecture.

27. (original) The method, as set forth in claim 26, wherein the device comprises a general purpose computer.

28. (original) The method, as set forth in claim 26, wherein the device comprises a special purpose computer.